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BSNews

MARCH/APRIL 1991

IRISH BUILDING SERVICES NEWS

AC & Ventilation Worth £31.5 Million

NRG Management Consultancy has just released reports on the air conditioning and ventilation equipment markets within Ireland. These are the final two of a series of reports which have been produced on the Irish Building Services Market. This full Irish study has been produced as part of the European Building Service's study, being project managed by The Building Services Research and Information Association.

Nineteen ninety two brings special opportunities and threats which all building services companies should know about. What is needed is a detailed study giving both national market information as

well as an overall view of the "single market" at a reasonable price, to include information on:

- the structure of overseas markets
- identity of the main suppliers
- best methods of entering each market

The EBS study is such a project.

The complete European study will consist of 84 reports and is being undertaken by 11 specially-selected partners and associates in each of the EC countries.

The study has the backing of 200 supplier clients, 10 of whom have a significant manufacturing facility or are based in Ireland.

The Irish Market for air conditioning equipment has been estimated at £19.7 million in 1988, while the Irish market for ventilation equipment has been estimated at £11.8 million in 1988. However, there is a certain amount of overlap between these two sectors, so the individual product markets within these two categories should be examined to give a more detailed picture. The

accompanying table shows the markets covered by each report and the value of each of these markets in Ireland.

AIR CONDITIONING

Packaged Air Conditioning £3.6m;
Heat Pumps and Dehumidifiers £2.3m;
Applied Refrigeration £8.0m;
Ductwork £2.7m;
Air Filters £1.7m;
Other Air Distribution Products £1.4m.

Continued on page 2

WE HAVE MOVED

BSNews has moved to new offices. Our new address is 5/7 Main Street, Blackrock, Co Dublin. Our new telephone lines are: 01-2885001/2/3. Fax: 01 - 2886966.

CIBSE TALLAGHT VISIT

Over 100 participants attended the recent CIBSE site visit/lecture at the Tallaght Town Centre. The occasion was sponsored by T Bourke & Co and included a 3-course meal plus tickets to the cinema! A full report, plus photographs, appears on page 16, along with other CIBSE news.



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READERSHIP DATA

Irish Building Services News (formerly Irish
H&V News) is Ireland's only Building Services
magazine providing coverage of the heating,
ventilating, air conditioning, refrigeration,
plumbing, maintenance and
environmental industries. It is the only
publication catering exclusively for these
industries and its circulation includes
members of the following:

The Institute of Consulting Engineers; The
Chartered Institution of Building Services
Engineers; The Institute of Domestic Heating
Engineers; The Energy Managers' Association;
The Institute of Plumbing; The Energy
Conservation & District Heating Association;
The Mechanical Engineering & Building
Services Contracting Association; The Irish
Builders' Providers Association; The
Association of Consulting Engineers of
Ireland; Irish Home Builders Association;
Maintenance Managers' Association.

In addition, Irish Building Services News
circulates to independent building services
contractors and key executives in industry,
Government, Semi-State and local authority
bodies. Essentially, our circulation is virtually
saturation coverage of all those with an
interest and/or involvement in the industry.

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**Hugh Munro, Brian O'Reilly, Sean McCarthy and Seamus Homan --
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An overview of the properties and application of copper tube by David
Moore, Sales Manager, Irish Metal Industries Ltd.

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PLUMBLINES

AC & Ventilation Worth £31.5 Million

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VENTILATION

Fans £2.4m;
Ventilation Units £3.6m;
Ductwork £2.7m;
Air Filters £1.7m;
Other Air Distribution Products £1.4m.

Applied Refrigeration — within the air conditioning report the market for applied refrigeration in Ireland has been estimated to be £8 million in 1988. In relation to the total market figure of £19.7 million, this is a significant proportion, and is also the largest market covered by the two reports.

The definition of applied refrigeration as used in the report is an air conditioning system that is made up of several components which have not necessarily come from one supplier. The total does not include industrial refrigeration as this is excluded from the study.

Results of the investigation carried out into the market include that the packaged chiller market is very heavily biased towards air cooled systems, with 90% of the market being for this type of cooling rather than water cooled. Also, it has been noted that between 60% and 70% of air handling units sold in Ireland do not include a cooling coil.

Major companies active in this area, according to the Report, are ABB, Reconair, Walker, Masterair, Redbro, Millex and Coolair.

Historically, the fortunes of this sector have been linked to construction activity. The demand for air conditioning has subsequently been increasing, as many of the new buildings are intended for

high technology industries or commercial sectors such as financial services where air conditioning is a pre-requisite.

Ventilation Units — Moving on to the ventilation reports, the largest market covered by this report is for ventilation units whose sales totalled IR£3.6 million in 1988.

Roof ventilators have been seen to account for a small proportion of the market in this sector in relation to other ventilators. The relatively large size of this market in volume and value terms is due to the sales of domestic/small commercial ventilation units. It has been estimated that these units account for 60% to 70% of the market by value.

Major companies active in this area, according to the Report, are Colt, Dan Chambers, GEC Distributors, Thermo-Air, Ventac, Vent Axia, Prime Time, Gradwood, Robertson and Kitchen Accessories.

Like the market for applied refrigeration, the market for ventilation units has basically followed the level of activity of the construction market.

Packaged Air Conditioning — Equal in size to the market for ventilation units is the market for packaged air conditioning, at IR£3.6 million in 1988.

CHANGING MARKET

In 1988, the cassette market was reasonably well established but this market has and is changing rapidly. Cassettes have been defined as split systems where the bulk of the internal unit is hidden from view. This is usually achieved by the unit being mounted in a false ceiling.

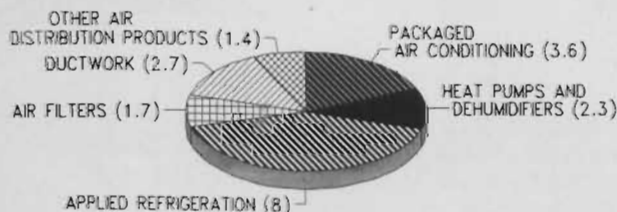
The other packaged air conditioning market is divided between large (greater than 18kW) packages and small. Large packages are less than 2% by volume but 20% by value. All the large packages and most of the small other packaged air conditioning

ROOF UNITS VISIT

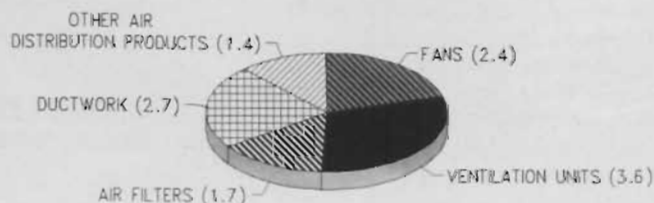


Building services consultants from the Republic of Ireland with Roof Units executives during their visit to the company's factories in Dudley recently. Dan Chambers Ltd is Roof Units distributor in the Republic and he accompanied the consultants on the trip. Dan Chambers is pictured above with his colleague Jim Bollard.

Irish Air Conditioning Market
(Values in £100,000, Source NRG Mgt Cons)



Irish Air Conditioning Market
(Values in £100,000, Source NRG Mgt Cons)



systems are "ducted splits". That is to say that air is drawn from the room by means of a duct before it enters the air conditioning unit. Return air also passes through a duct.

Major companies operating in

this market, according to the Report, are Coolair, Mitsubishi, Phelan, Walker, Edpac, DC Compute Air and Liebert.

Other areas covered in both of the reports are the markets for ductwork, air filters and

TRADE NEWS

other air distribution products.

The air conditioning and ventilation reports are supported by hard market data from personal interviews with the main suppliers. The air conditioning report contains 38 tables, and the ventilation report contains 40 tables.

In the Appendices, the addresses of the main manufacturers, importers and distributors are supplied with a contact name.

For the 11-volume air conditioning report, or the 11-volume ventilation report, the cost is £2200 and Ireland is just one volume.

The Report contains detailed information on air conditioning which is broken down as:- packaged air conditioning; heat pumps and dehumidifiers; applied

refrigeration; ductwork; air filters; other air distribution products; and appendices.

Ventilation is sub-divided as follows:- fans; ventilation units; ductwork; air filters; other air distribution products; and appendices.

Headings for major product sectors are:- Summary; Market size structures and segmentation; Major companies; Historical trend and future forecast; Inter-EC and overseas trade; Distribution; Pricing, discounts and margins; End-user sectors and application; Specification; Barriers to entry; and Recommendations on market entry.

NB: The other product group reports already published are:- Domestic Heating; Commercial Heating; Plumbing; and Controls.

LETTER

Sir

Your leader "Let's be Positive" in the February issue of BSNews would have inferred that my letter to you of the 14th of February and published in the same edition, was a message in the "doom and gloom" mode.

I would like to point out to your readers that this was not my intention. The intention was stated in the first paragraph and was "to make some comments on what I considered to be inaccurate forecasting". If our competitors in the industry i.e. those you spoke to in January, feel that the forces outlined in my letter won't affect this sector, well good luck to them.

As a manager of a unit competing in this sector, I have taken the pragmatic view that all information presently available such as OCED reports etc should be used when developing a strategy to compete in our market place.

This information coupled with our records has helped us to devise the strategy we are presently working to. The result of which is that we are now 90% up on the level of the average amount of small A.C. units sold in the first three months of '88, '89 and '90.

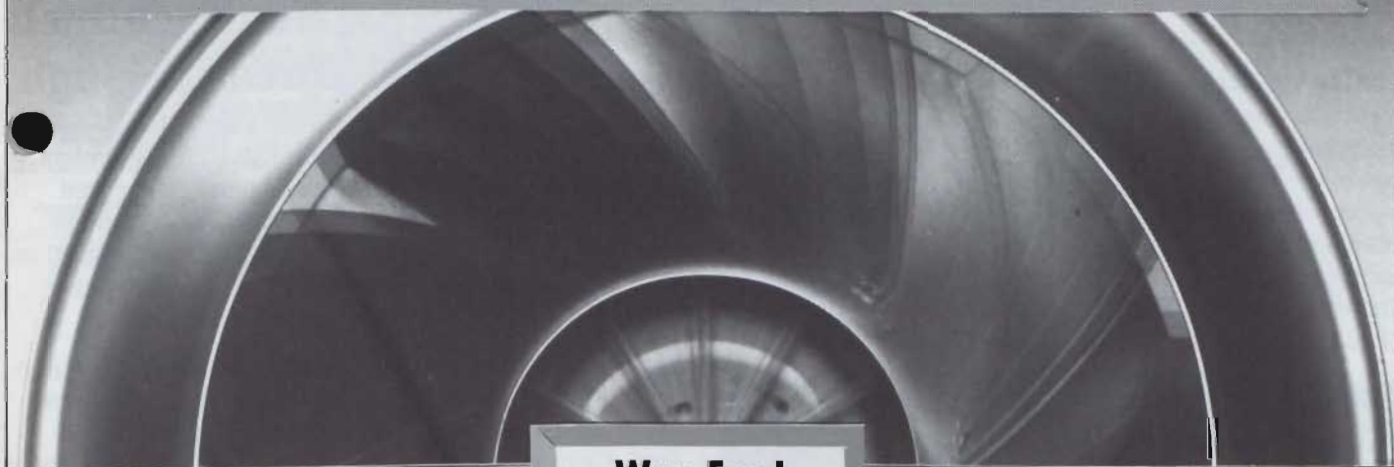
Finally, by offering the wide range of products we now have in this sector, coupled to our strategy, we firmly believe that we are one of the more optimistic and "not so aggressive" competitors.

Kieran Butler,

Services Manager

WALKER AIR CONDITIONING

WHO PRODUCED THE WORLD'S FIRST SPEED CONTROLLABLE EXTERNAL ROTOR MIXED FLOW FAN?



WHO ELSE!

Another first for Roof Units. This outstanding unit combines the volume capability of an axial with the pressure development of a centrifugal fan.

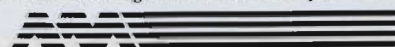
The range offers far greater value than the dated two-stage axial, being quieter, easier to install and unbelievably, less expensive.

The direct drive motor has full speed control for flick of a switch variations in performance and incorporates Hot Spot thermal protection.

Roof Units provide the best fan range with the best powered units in

the world and back it up with the best service and delivery through a nationwide network of distributors and overseas agents.

As you would expect, Roof Units hold registration of BS5750 part 1 quality assurance scheme and are committed to making available the very best in fan technology.



ROOF UNITS GROUP

A MEMBER OF THE AIR MOVEMENT GROUP

AVAILABLE VIA DUBLIN & BELFAST DISTRIBUTORS DAN CHAMBERS LIMITED 01-303222 ENVIRONMENTAL SUPPLY CO LIMITED (0232) 453329

BSNews, March/April 1991 3

TRADE NEWS

New "Intelligence" From Grundfos

Grundfos has introduced the integrated electronic control X 99 micro frequency converter which will set new standards in pump technology. Now pump, motor and control components can be combined in one compact unit.

Grundfos has succeeded in placing the "intelligence" of a controller, the power circuit and all the components of a bulky frequency converter on one miniaturised power module.

Up to now pumps were mainly controlled according to the phase-cut control principle. Not only were the control components so big that they had to be placed in separate control boxes, but they also had some drawbacks in terms of noise development and limited control range.

The tiny Grundfos controller can be integrated in the terminal box of the pump. Moreover, it is just as "intelligent" as conventional controllers and even offers a number of additional advantages

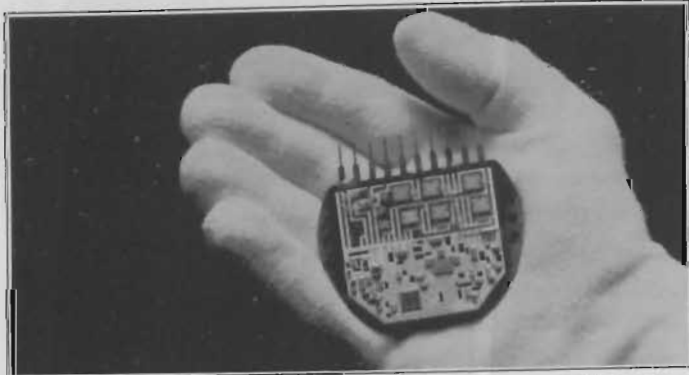
compared to the phase-cut control systems.

Not only does the compact controller have an excellent price/performance ratio, it also reduces energy consumption. In addition, inconveniences such as noise in motor and piping have been significantly reduced and the control range — compared to conventional products — clearly extended.

The X 99 power module is equipped with interface technology and is thus capable of external communication. This means that the unit can monitor and control one pump as well as a complete pump system as it can be incorporated in complex building management or DDC-Systems.

Interdab Roadshow

The Interdab Roadshow is currently touring the Republic of Ireland with 15 venue-stops planned by the organiser, Roy Tolan, of Consolidated Pumps,



The X99 Micro frequency converter integrated in the terminal box of the Grundfos pump.

<https://arrow.tudublin.ie/bsn/vol30/iss3/1>
DOI:10.21427/D77713

MITSUBISHI DEALER CONFERENCE



Mitsubishi Electric's Air Conditioning dealers attended their annual conference recently, where the theme was Creative Marketing 1991. The conference outlined plans for the future as well as new products coming on stream over the next three years.

Pictured at the Conference were (seated, left to right) are: Laurence Thompson, Thompsin Air Systems, Mallow; Tom Blount, Frescold Services Ltd, Waterford; Fergus Madigan, Managing Director, Mitsubishi Electric; Damien Parlour, Tempair Ltd, Dublin and David Ross, General Manager Mitsubishi Electric Industrial Division.

Standing (left to right) are: David McDonald, Refrigeration Engineering Ltd., Kilkenny; Colm Mulcahy, Mitsubishi Electric; John Brogan, Coolrite, Cavan; Clement Whiriskey, Whiriskey Refrigeration,

Interdab's Irish distributor.

Athlone, Castlebar, Galway and Ennis have already been covered. The remaining venues, and dates, on the nationwide schedule are as follows:-

16 April, Silver Swan Hotel, Sligo; 17 April, Longford Arms Hotel, Longford; 18 April, Grenville Arms Hotel, Mullingar; 23 April, Talbot Hotel, Wexford; 24 April, Clonmel Arms Hotel, Clonmel; 25 April, Springhill Court Hotel, Kilkenny; 30 April, Victorial Hotel, Macroom; 1 May, Grand Hotel, Fermoy; 2 May, Hayes Hotel, Thurles; 9/10 May, Jury's Hotel, Dublin.

The show will open from 3pm to 8pm at all venues.

Dunham-Bush Breakthrough

Dunham-Bush Ltd — through APV Hall Ireland Ltd — have introduced a range of air cooled packaged chillers based on the company's vertical screw compressor.

Using the latest computer-aided design techniques, Dunham-Bush has developed a highly-efficient range of units with capacities from 400 up to 625kW in single package configuration and 1200kW in dual arrangement, to meet the increasing demand for air cooled equipment.

The new ACX(T) units are
Continued on page 9

Armstrong take the guesswork out of insulation.

Armstrong, leaders in flexible insulation systems and products, have introduced a new service for insulation specifiers.

Using a specially designed and commissioned computer program our technical experts can calculate for you on the spot, the type and thickness of insulation required for virtually any given installation.

By inputting into the computer the appropriate data such as specified temperatures, pipe dimensions, insulation thickness and thermal

conductivity, we can calculate heat loss, – or heat gain for refrigeration systems, – surface temperature or the thickness of insulation necessary for condensation control.

That way you spend no more than you need to achieve an effective answer to your insulation requirements.

To arrange a visit by our technical representative just call Alan Beattie on 045 32150.

And save yourself money and effort.



Armstrong
SERVICE
IS OUR STRENGTH

OZONE
friendly

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Class 'O' Armaflex

Armstrong
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- Total Product Systems ● Calculation Services ● Installation Training Courses ● Technical Information ●
- Telephone Advisory Service ● Widest Range of Products and Sizes ● 35 Years Experience ●
- Technical Consultants ● Ozone Friendly Flexible Insulation ● Information Publications ● BS 5750 Quality Assurance ●

25



CELEBRATING SILVER JUBILEE TRADING PARTNERSHIP

While contractual ties form the basis of most business arrangements, there is no doubt but that such arrangements - where they evolve and develop into successful trading relationships - result in a commercially beneficial partnership for all the parties involved.

Such is the case with Heatavent Ltd and Armstrong World Industries, Insulation Products Division. Their's is undoubtedly much more than a business arrangement... it is a true trading partnership which has grown and strengthened over the last 25 years to the point where Heatavent has established Armaflex as the foremost name in insulation in Ireland.

Twenty five years ago Heatavent Ltd was but a fledgling company, established by principal director and shareholder Joe Noone and his now-deceased brother Pat, trading out of rented premises in the Crumlin district of Dublin.

Today it is one of the foremost suppliers of heating, plumbing and insulation products to the Irish building services industry, operating from a wholly-owned 15,000 sq ft complex situated in a prime location on the Naas Road in Dublin.

It comprises extensive stores, loading bay, offices, trade counter, workshop and a purpose-designed showroom.

Heatavent is now a very successful company in its own right but Joe Noone is quick to acknowledge the invaluable contribution Armstrong has made in bringing that situation about.

But it has been a mutually beneficial arrangement. Back in the Irish context of 1965 Armaflex was equally unknown. Nonetheless, even at the earliest stages in their relationship, it became apparent that Heatavent was the vehicle by which the brand would be established throughout Ireland.

Not that it was easy. It involved a great deal of hard work on the part of Heatavent while Armstrong, for their part, provided all the assistance and technical support Joe Noone asked for.

So were set the seeds for a very close trading relationship which, especially in those early days, also included Armstrong accounting personnel coming to Dublin regularly to assist Heatavent with the establishment of a professionally-based business.

Neither Armstrong nor Heatavent have looked back since. In addition to being a successful trading relationship, it has also been a very profitable one.

The key is that it is a great deal more than a mere business relationship. Personalities and a certain type of business ethic -- which Armstrong and Heatavent share -- are as important as the quality and performance of the product.

Right from the beginning, personal relationships between the people involved was also a contributory factor. Heatavent carries that philosophy through to its trading arrangements with its customer base.

The Heatavent team of today comprises 16 individuals, each with a defined role to play but with a broader brief which entails a great deal of cross-over as and when the need arises.

There are three sales representatives on the road full time -- Paul Newman who looks after the greater Dublin region and Leo Kelly and Paddy Scriven who serve the remainder of the country.

David O'Reilly, Eamon Synott and Tony Kane look after all internal sales while Joe Noone's son, Ian, has responsibility for all purchasing and ensuring its timely arrival and the maintenance of adequate stock levels.

The emphasis on people permeates the entire operation and is particularly evident at the trade

The key is that it is a great deal more than a mere business relationship. Personalities and a certain type of business ethic - which Armstrong and Heatavent share - are as important as the quality and performance of the product.

25

counter where as much effort is put into making the immediate environment comfortable for customers as it is to fulfilling their orders.

For instance, it opens as early at 7.30 am each morning with fresh coffee available at all times and three national newspapers at the disposal of customers who may be delayed or who simply want a break.

But back to the product itself.

The first major breakthrough Heatovent had with Armaflex was when Eamonn O'Brien, a consultant with Robert Jacob & Partners, specified the product on a major project.

Thus it came to the attention of other consultants whose widespread specification of Armaflex brought it to the notice of merchants. Prior to this they were reluctant to carry the product but now it became much sought after by the merchant sector throughout the entire country.

Once this initial hurdle had been cleared, the quality and growing reputation of Armaflex -- coupled with the support and technical back-up of Heatovent personnel -- did the rest.

As well as being a top-class product with an infinite variety of applications -- non industry uses such as protection covering for the lower end of rugby posts comes to mind -- it is also a very simple product.

There is nothing to go wrong with it. There are never call backs except where the product has been incorrectly used. However, such instances are few and far between and essentially only arise where it has been patently abused.

It would be impossible to detail in its entirety the full extent of the Armaflex range. Consequently, the following is a brief illustrative selection of the type of product in the portfolio and the application for which it is intended.

ARMAFLEX CLOSED CELL INSULATION

Flexible closed cell insulation for refrigeration equipment, air conditioning systems, chilled water lines and low temperature hot water systems.

AF/Armaflex and Class 'O' Armaflex are high quality, flexible, closed-cell materials designed to eliminate condensation problems on low temperature installations. They are ideal for use in supermarkets, shops, breweries, pubs, etc where high standards of efficiency and health and safety must be maintained.

CLASS "O" FIRE PERFORMANCE

Class 'O' Armaflex is available in tube and sheet form with a fire performance to Class 'O' of the UK 1985 Building Regulations.

In addition to its outstanding fire protection performance, it is an efficient dust and fibre-free

insulation material with an integral closed cell vapour barrier that enables it to be installed without recourse to foils and surface coatings.

It is an ideal choice for buildings with high occupancy levels such as hospitals, schools, supermarkets, hotels, apartments, etc.

ARMALOAD PIPE SUPPORT SECTIONS

Armaload is a high density load-bearing Armaflex formulation designed to perform a pipe-support function in low temperature applications where an integral vapour barrier/fire rated material is required.



Joe Noone, Managing Director, Heatovent Ltd, receiving a commemorative plaque from Robin Kemp, Managing Director, Armstrong World Industries Ltd, marking the 25-year trading relationship between the two companies.

Armstrong have the expertise and the know-how.

- ? *What insulation thickness is required for frost protection on plastic pipes.*
- ? *What are the regulations covering the insulation of hot water pipes and cold water pipes in a domestic dwelling.*
- ? *On refrigeration pipework what thickness of Armaflex is required to prevent condensation and how do you support the pipes to maintain the thermal efficiency at the support.*

We can deal with all your most urgent and practical queries, answering questions like these.

As leaders in flexible insulation products and services, Armstrong not only have the answers to your product needs, but also for the everyday practicalities of installing that insulation.

Should you have a problem concerning any aspect of insulation, we're here to help. With special information sheets, installation manuals, technical expertise and training courses for your assistance.

So next time you want professional information on any aspect of insulation installation, pick up the phone and call our Territory Manager, Alan Beattie, on 045 32150.



Armstrong
SERVICE
IS OUR STRENGTH



- Total Product Systems ● Calculation Services ● Installation Training Courses ● Technical Information ●
- Telephone Advisory Service ● Widest Range of Products and Sizes ● 35 Years Experience ●
- Technical Consultants ● Ozone Friendly Flexible Insulation ● Information Publications ● BS 5750 Quality Assurance ●

TRADE NEWS

Continued from page 4

the first air cooled package chillers based on Dunham-Bush screw compressor technology to be offered as standard in Ireland. Long life reliability is ensured.

The inherent benefits of this type of compressor in terms of ultra low noise and vibration, reliability and part load performance are already well established. Although the ACX(T) is the first range of air cooled screw compressor packages to be offered in Ireland, Dunham-Bush, Portsmouth has already applied both vertical and horizontal screw compressors to many remote air cooled applications.

Like all Dunham-Bush

machines, the vertical screw compressors utilised for the ACX(T) range are designed to operate HCFC22 and will combine efficient cooling with environmental care.

The modular design allows flexibility at selection stage to ensure the ideal combination of plan area, acoustic performance, energy efficiency, initial cost, and control capability to suit the stringent design requirements of modern applications.

Particular attention has been given to the choice of fasteners, raw materials and the finishing techniques to ensure long life durability for all ACX(T) units.

Noise suppression is



The winner of the 1991 National Apprentice Plumber of the Year is Keith Sweeney, Saggart, Co Dublin. Nineteen year old Keith works with M.C. Molloy Engineering Services, Rathfrankham, Co Dublin. Keith is pictured receiving the Wavin trophy with (from left): Larry Carr, Marketing and Sales Director, Wavin; Seamus Murrin, Assistant Head, Metal Fabrication and Plumbing Department, Bolton Street; and Leo Tolan, Technical Representative, Wavin.

equally comprehensive. The vertical screw compressors are contained within a fully enclosed engine house bolted to one

end of the "W" condenser coil section. The compressor enclosure is acoustically lined as standard.

We pump hot water.

Fast - Reliable - Economical

When it comes to central heating Dab have a range of pumps that performs to the highest specification.

Robust, modern and well engineered.

For information contact your local agent or phone 01-594735 (fax 01-594727) for information pack.

INTER DAB PUMPS



Consolidated Pumps Limited

Knockmeenagh Road, Newlands Cross, Clondalkin, Dublin 22.



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ADVANCED SALES LEADS

Newmarket Information, the Dun Laoghaire based construction information company, provides advance information on new construction projects nationwide - all potential leads for contractors, sub-contractors and suppliers. The company publishes information in the weekly CIS report which provides full project details, contact names, addresses and telephone numbers, design team details and tendering and construction schedules. The following listing is provided by CIS Report and gives a brief description of the types of projects covered. To obtain information on the service phone 01-809476/809557.

DUBLIN

The Industrial Development Authority has been given the go ahead by Dublin County Council for site development works for industrial use at Stephenstown, Ballbriggan, County Dublin. Tenders have been sought from a select list of site development contractors and work is to commence shortly. The new factory for Kaumagraph will be built on this seven acre site.

An outline planning application has been submitted to Dublin County Council for a £8 million recreation project on a site adjoining the south section of The Square in Tallaght, Dublin 24, by Monarch Properties Limited. Bowling, snooker, ice skating, restaurants and the latest high-tech "Quaser" game facilities are envisaged. Also included is around 1,200 sq.m. of retail floor space and parking for 798 cars. The design

is to blend in with the existing structure distinguished by its pyramid shaped apex. CIS states that discussions aimed at a buyer or tenant for the proposed centre are well underway with a continental European leisure group with extensive interests in the US. Work on the fourteen month project will start as soon as permission is granted.

Leisure Corp Holdings Limited has sought planning permission for the proposed change of use to 38 bedroom hotel, including a function room for late night dining and dancing, a leisure complex, the development of offices measuring 1,660 sq.m, retail space measuring 495 sq.m. and an ancillary development including car parking for 120 spaces, the widening of Observatory Lane, the demolition of a lodge on lands acquired from the Leinster Cricket Club all on a site measuring 8,076 sq.m. between Observatory Lane and Parker Hill of

Lower Rathmines Road, the Town Hall, and the lands to the rear. According to CIS Report the cost of the development will be in the order of £5 Million.

Stationery and Office Supplies have been granted planning permission by Dublin County Council for the erection of an extension and alterations to an industrial unit at Arkle Road, Sandyford Industrial Estate, Dublin 18. The single storey extension will measure 280 sq.m. SOS have yet to decide whether to seek tenders from building contractors or negotiate a building contract.

The Brown Thomas department store has sought planning permission for the erection of a three storey building for workshop and store facilities at Duke Lane at the rear to 8 Duke Street, Dublin 2. The three storey extension will measure 332.98 sq.m. and will be situated on a 120.27 sq.m. site. Building work is to begin in April and will take three months to complete.

LIMERICK

Architects, Hassett Leyden and Associates of Limerick are preparing preliminary drawings for the erection of a new £400,000 fire station at Kilrush, County Clare. The station will include office and staff accommodation, a frill tower and training yard.

Once the plans are completed they will be sent to the Department of Environment for approval. Tenders are expected to be sought from building contractors to carry out the work later this year.

WEXFORD

Tony Kirwan Plant Hire Limited is currently carrying out site development works for the erection of a £400,000 advance factory and a new access roadway onto the public road at Butlersland, New Ross, County Wexford. The two storey unit will measure 1,954 sq.m. and will have part office accommodation on the first floor. the ground floor area will be used for factory and workshop space. The building, is being promoted by a local community group and may eventually be marketed by the Industrial Development Authority.

GALWAY

Building Contractors, James Stewart Limited of Galway started work four weeks ago on the construction of an £800,000 advance factory unit at the Place Technological Park in Castlebar, County Limerick. The single storey unit will measure 2719.92 sq.m. and will include two storey office accommodation.

KILKENNY

SFL Engineering Limited of Kilkenny plans to extend its factory

ADVANCED SALES LEADS

et al.: BS News

buildings and offices at the Industrial Estate, Callan, County Kilkenny. The extension will measure 1,158 sq.m. in total involving 600 sq.m. of additional administrative area and 558 sq.m. of factory space. The expansion is expected to increase total employment to 120 within three years.

KILDARE

Power Seeds Limited of Kildare plans to build additional wholesale storage space at Portglorium, Kilcock, County Kildare. The unit will measure 1,500 sq.m. and work will start before the Summer and will take three to four months to complete. The unit will be used for the storage of grain and corn.

WESTMEATH

Mergon International Limited of Castlepollard sought planning permission of Westmeath County Council for the erection of a factory extension and a new car park at Townpark, Castlepollard, County Westmeath. The single storey extension will measure 1,732 sq.m. and it will be built in a structural steel frame, with the work being carried out by Andrew Manning Engineering Limited. Michael Kirby of Geoghegan is currently carrying out the building contract.

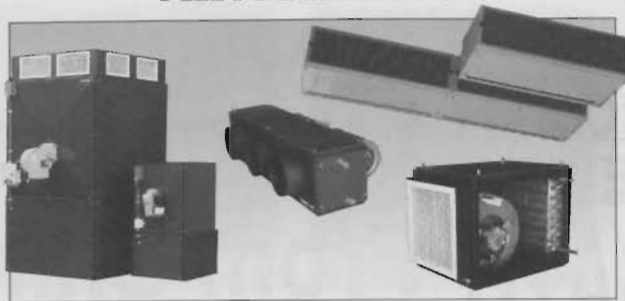
KERRY

Prodent Limited the Killorglin based dental supplies company has been granted permission by Kerry County Council to develop a new storage building with office accommodation and ancillary facilities at Tulligmore, Killorglin, County Kerry. Prodent is currently finalising negotiations on a construction contract with a building and steel and roofing contractors and building work is expected to start immediately. The part two storey unit will measure 450 sq.m. and will include offices on the first floor and the storage unit will be overhead. Investment will be in the order of £100,000.

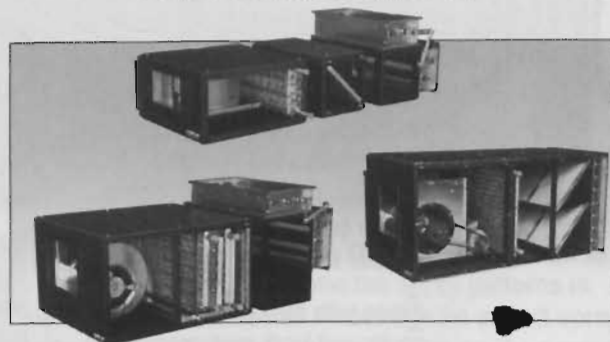
CAVAN

Engineering Construction and Design Limited of Kells has been awarded the building contract for the demolition of a small building and the erection of a new 560,27 sq.m. warehouse at Ballaghanea, Virginia, County Cavan for Ezy Koter Limited. the single storey warehouse will be situated on a 5,365 acre site. Work started recently and will take eight weeks to complete. Ezy Koter manufacture paint, rollers and currently employ fifty people.

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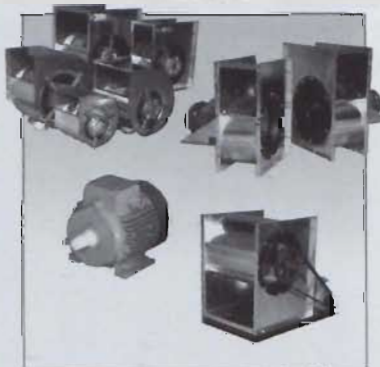
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**PRODUCT
REVIEW**
**BATH
ROOMS**

Luxury Polka From Shires

Due to increased market demand for "space efficient" corner baths, Shires have introduced the Polka — an offset corner bath.

Its dimensions — 1520 x 935mm — compare very favourably with the standard bath (1700 x 700mm), making the style of a corner bath suitable even for the smaller bathroom.

Along with the comforts of a contoured back rest, moulded seat and soap shelf, a whirlpool option is also available.

The Polka is available in the full range of Shires' colours and offers the choice of right or left hand tap holes. It is manufactured to BS 5750 and carries the 25-year bath guarantee.

You can see the Polka along with the full range of Shires products at their new showroom at Broomhill Road, Tallaght or at leading merchants throughout the country.

Also new from Shires is a lavishly illustrated book in full colour called "The New Bathroom Collection".

It comprises 24 pages covering all products in the bathroom and sanitary ware markets which are manufactured by Shires.

Catering for all tastes in design, shapes, sizes and colours, Shires has nine co-ordinated bathroom suites illustrated in its new book.

For instance, the Bolero is styled in a soft peach and features washbasins designed in two sizes together with a recessed overflow. The Bolero Bath includes armrests, together with a raised headrest.

Another suite from Shires is Adelphi. This combines mahogany along its sides and also on the WC seat and rim cover. The Adelphi Bath comes with a 25-year guarantee. Art Deco styling is supplied in both high and low level designs.

The additional Shires suites illustrated in the new book include Prelude; Carousel; Accord; Blue Delf; Naiad; Serenade and Medley.

Comprehensive dimensional drawings are included on each page, giving the reader precise,

practical measurements. Shires baths, both of the sunken and circular design, are shown as are the many rectangular baths, including three Steelyne designs.

Completing the many items featured are: Showers & trays; Taps & mixers; Cloakroom and vanity basins.

Details, including copies of The Bathroom Collection, can be obtained in most Builder's Merchants or direct from Shires Ireland Ltd, Broomhill Road, Tallaght, Dublin 24. Tel: 01-515877; Fax: 01-515534.

Myson Towel Warmer

The new Multirail towel warmer extension from Potterton Myson has two bars, giving extra capacity to hang and warm towels.

Part numbers are MRCA 1,2 and 3 to fit any model — one for each model of Multirail, including the electric version.

The 2-bar rail is easy to fit, its support fitting slips behind existing bars and screws in place. It can be fitted at any level.

Details from Myson (Ireland) Ltd, Unit 12E, Parkmore Industrial Estate, Longmile Road, Dublin 12. Tel: 01-509075; Fax: 01-553629.



Polka bath from Shires.

Hansgrohe from H2O....

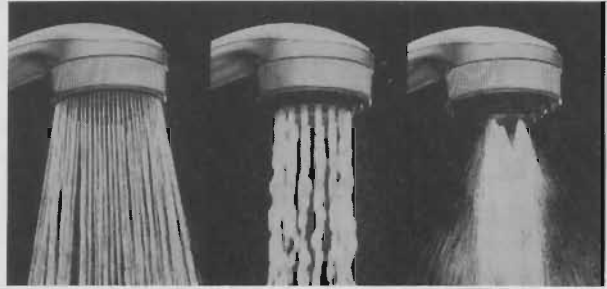
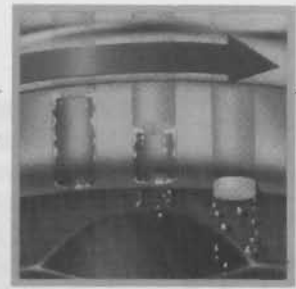
H2O Pumps Ltd are the sole importers and distributors for Hansgrohe Europe's No:1 shower manufacturer. The range

PRODUCT REVIEW BATH ROOMS

consists of three complete systems — the Mistral; the Tristar, and the Aktiva. A complete system consists of a fixed overhead, a rail set and up to six body sprays, a diverter; a stop valve, and a thermostat calibrated in degrees Centigrade.

All of the handsets now incorporate Hansgrohe's unique quick-clean system whereby everytime the mode is changed 72 pins move into the diffuser channel and remove any lime or scale present. This results in a shower head that really is self-cleaning.

Likewise, the Nova flex hoses incorporate a swivel bearing which prevents twisting or kinking of the hose which is also reinforced each end by a



New from Hansgrohe — featuring the Quick-Clean system to solve lime scale problems. Each time the spray patterns is changed from the normal mode to a massage jet or soft spray, 72 pins are shifted into the diffuser channels forming the normal spray. In this way the shower is kept free from any particles of dirt/lime deposits in the course of daily use.



SHIRES BATHROOMS



The worlds finest bathrooms

Shires Ireland Limited, Broomhill Road, Tallaght, Dublin 24, Ireland. Telephone: Dublin (01) 515877. Telex: 31337. Fax: (01) 515534.

PRODUCT REVIEW BATH ROOMS

stainless steel coil internally. All this results in a hose which is virtually indestructible (by normal use.) All the fixed heads and body sprays use elastomer on the waterways which prevents lime and scale adhering.

The spray modes available on the heads are 1: soft (aerated water); 2: normal (needle spray); 3: massage (pulsating). There are 10 different finishes available, including colours.

Hansgrohe's latest offering is the Shower Temple, a circular domed enclosure measuring 1.65m in diameter and fitted out with body sprays and overhead handset with controls both inside and out. The Shower Temple also comes complete with its own lighting if required.

Also available from H2O Pumps Ltd, are superb shower enclosures from Huppe and

Artweger who will also supply custom-made doors for non-standard or unusual shapes.

For any further information

contact: H2O Pumps Ltd,
Ballycorous, Kilternan, Co Dublin.
Tel: 01-822025;
Fax: 01-823971.

Go Take A Shower... with Heatmerchants

More and more — because of its convenience, economics and "greenness" — showering reflects the lifestyle of the 1990s. Consequently, the demand in the shower sector has grown considerably in recent years with manufacturers and distributors offering a far greater choice than in previous years.

A typical example is Heatmerchants who — by virtue of their involvement with Gainsborough and Laconite — offer a comprehensive choice of

all shower-related equipment.

Taking Laconite first, they produce an extensive range of shower trays and shower enclosures using only the highest-quality materials and the most advanced production procedures.

Typical of the range is the Rainbow collection which includes the following:-

- Corner entry enclosure in white;
- Corner entry enclosure in pearl silver;
- Corner entry co-ordinated in

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PRODUCT REVIEW BATH ROOMS

misty peach;
— Victoriana pivot door and side panel in gold;
— Pivot door with matching side panel in white;
— Pivot door co-ordinated in misty grey;
— Bi-fold door with side panel co-ordinated in champagne;
— Bi-fold door enclosure in white.

New to the Rainbow Collection is a folding bath screen manufactured in anodised silver frame with raindrop-effect styrene panels. It can be fitted to either end of the bath with the minimum of time and tools.

Also new from Laconite is a detachable panel shower tray designed with the installer in mind to ensure easy access.

As for the showers themselves, Gainsborough offers a wide

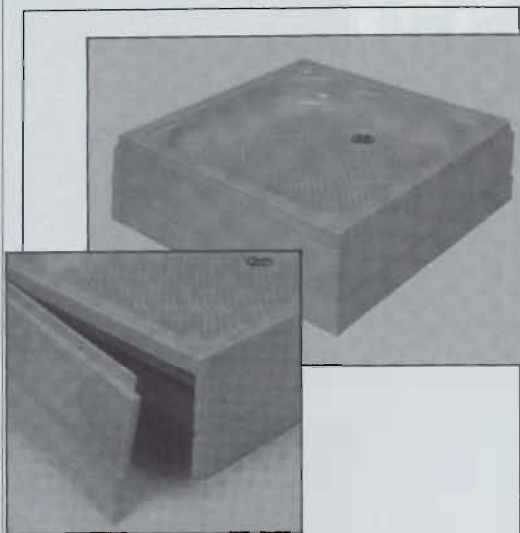
choice, the Escort, Escort Plus and the Sovereign being models

that Heatmerchants have readily available.

These instant electric showers are made to exacting standard specifications to ensure optimum performance over a prolonged length of time.

Details from Heatmerchants Ltd at Athlone (0902 - 92755); Cork (021 - 506944); Dublin (01 - 6231248); Kilkenny (056 - 62244);

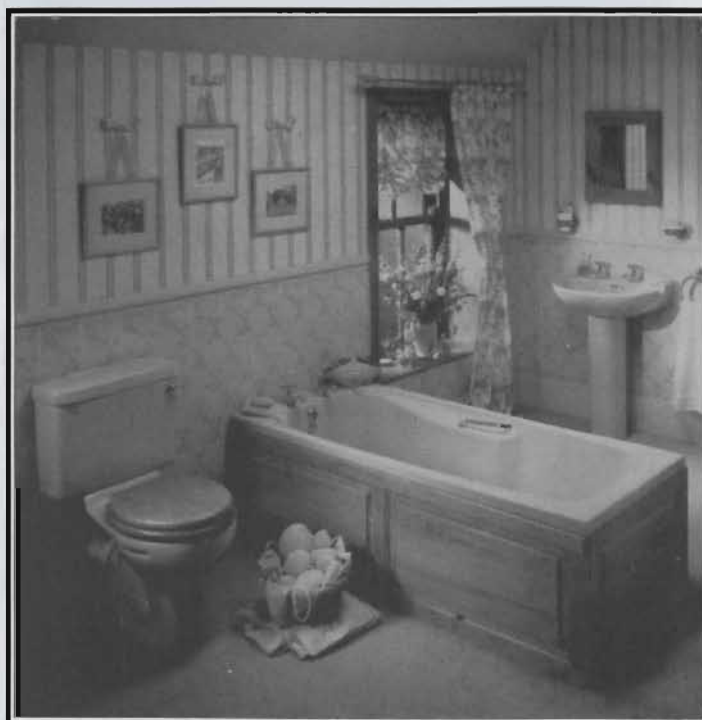
Limerick (061 - 311206); Sligo (071 - 62133); Waterford (051 - 77304).



Laconite's new detachable panel shower tray. Details from Heatmerchants.

heatmerchants/HOMESTYLES

"The Heatmerchants group includes 'Homestyles' Ireland's largest Bathroom and Shower showrooms. The entire range includes Spring Bathrooms, Laconite Shower enclosures, Gainsborough electric shower Quantum power showers are all shown in luxury settings. The Showrooms are open to the general public as well as Heatmerchants trade merchant customers.



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CIBSE NEWS

Student Awards

The CIBSE Annual Student Awards were presented to students in the Diploma and Degree courses at Bolton Street recently.

Sponsorship is by SMC with the adjudicating panel comprising Sean McCarthy of SMC, High Munro, Brian



Degree Course winners — Pictured with Sean McCarthy and Michael Buckley are Paul Smith, Noel Burns and Christopher Clarke.



Diploma Course winners — Pictured with Sean McCarthy and Michael Buckley are Fergus Purton, David Giffney and John Hickey.



Overall view of some of the participants in the CIBSE Tallaght Town Centre site visit enjoying the meal generously hosted by Teddy Bourke.



Teddy Bourke, host and Michael Buckley, CIBSE Chairman, pictured with speakers Brian McCarrick (left) and Leo O'Kane and Philip Woods (right) at the Tallaght Town Centre.

Centre site visit last month which was hosted by Teddy Bourke of T Bourke & Co Ltd who treated all those present to a full, sit-down 3-course meal before the proceedings got underway.

This particular event was originally intended to be the second part of an overall presentation on Tallaght Town Centre, the first meeting scheduled to have been held as a "technical seminar" prior to the site visit.

However, the date coincided with one of the major snowfalls we have experienced this year, the consequences of which was that the original meeting was cancelled.

Not to be outdone though, the intending speakers for that occasion — Brian McCarrick and Philip Woods of McCarrick Woods and Leo O'Kane of O'Kane Engineering — all agreed to give shorter versions of their papers during the site visit.

Hence the 100 plus attendance at the site visit received the benefit of three technical papers while also being able to view for themselves the practical application of the details as outlined in those papers.

As a consequence of the evening, the consensus of opinion to emerge during the question and answer session was that technical evenings should be arranged whereby full presentations could be made on the AC, BMS and Security systems at the Centre.

O'Reilly and Seamus Homan.

The three top students in each course receive a special award, the final phase in the adjudicating process being that they themselves have to present a paper on their chosen topic to the attendance on the evening of the presentation ceremony.

Tallaght Site Visit

Over 100 people attended the CIBSE Tallaght Town

Nuremore Calling!

Once again Nuremore beckons.

What more can be said about this unique industry event.

Dates are the last weekend in May.

A number of improvements (if that's possible) are planned by the organising committee. However, details will only be revealed at the time.

One change we can announce though is that this year the "non-golfers" will have the Nuremore course to themselves with the "real golfers" playing their competition at nearby Ardee.

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PROJECT PROFILE

No one travelling along the Dublin-Belfast road can fail to see the latest building completed at Dublin Airport. The new hangar for TEAM Aer Lingus not only doubles the company's hangarage but also overlooks the main airport entrance roundabout. Neil Steedman took a look inside.

TEAM AER LINGUS HANGAR, DUBLIN AIRPORT

Airlines worldwide may be facing difficult economic times, but the aviation maintenance and engineering industry is in great demand and is booming in this country. In the forefront of this growth in Ireland is TEAM Aer Lingus, which provides a comprehensive range of aircraft and component overhauls, as well as providing aircraft support and consultancy services.

Increasing demand has resulted in the construction of a six-bay hangar big enough to handle two Boeing 747-400 aircraft simultaneously. The new facility doubles the total capacity of TEAM Aer Lingus hangarage to 52,488 square metres, capable of servicing three wide-bodied and ten narrow bodied aircraft at any one time.

While the size of the project is impressive, the speed at which it was designed and constructed is even more so: maintenance on the first Boeing 747 (belonging to Virgin Atlantic) began on 15th January 1991, some 17 months after the Aer Lingus in-house aviation consultants began to develop the detailed

brief!

Aer Lingus sought submissions in September 1989 from a shortlist of Irish consultants for project management and design and on 1st October 1989 accepted proposals submitted by Muir Associates and Sir Frederick Snow & Partners Ltd., in joint venture. The mechanical and electrical engineers included in their design team were Sir Frederick Snow & Partners Ltd and MacArdle McSweeney Associates.

Earthworks started just seven weeks later on 20 November 1989 but fundamental briefing decisions continued to be made until January 1990. By the end of November 1990 the building was more or less airtight, was scheduled for completion on 28 February 1991, and will become fully operational in May 1991.

Given this fast-track performance, it should perhaps also be noted that, because Aer Lingus were the developers rather than Aer Rianta, the project was required to be processed under all normal planning and bye-laws procedures.

The project involves a total investment of some £35 million, of which £24 million is for the building (there are also 38,000 square metres of airport apron and car parking). The services account for about £5.8 million.

THE STRUCTURE

The project effectively comprises two buildings which adjoin each other. The main hangar measures approximately 160 x 115 metres and has a split roof providing 22.5 metres headroom over a 160 x 56 metre area and 15 metres headroom over another 160 x 45 metres. An adjoining 4-storey block of offices and workshops measure approximately 160 x 10m. (For those with an imperial mind, the hangar thus has a floor area of 180,000 sq ft and an enclosed volume of about 15 million cu ft while the supporting offices/workshops total some 86000 sq. ft.).

The hangar structures consist of a steel frame with nine main box-lattice columns. Floors are insitu concrete slabs on preformed metal

PROJECT PROFILE

decking, walls are Robertson BR6 and Trimapanel sandwich panels (BR6 and Formawall 1000 were used for the offices), windows are Synthapulvin aluminium curtain walling and patent glazing, and the roof is Kingspan composite insulated trapezoidal panels at 6 degree slopes with asphalt.

The 160-metre facade to the airport apron comprises four leaves of electrically operated doors, each measuring 40 metres by 21 metres high and having its own 160-metre long track, thus enabling all leaves to be "parked" in any position.

FACILITIES AND SERVICES

The 4-storey building provides two sets of centralised hangar support and control offices (operationally, the hangar is treated as two adjoining bays each capable of taking one wide-bodied and two narrow-bodied aircraft in for maintenance) complete with fax, SITA, telex, telecommunication, computer support and secretarial support; TEAM Aer Lingus executive offices; and support workshops, including sheetmetal, paint, fibreglass, cleaning, hydraulic, pneumatic, avionic, NDT airframe and aircraft interiors.

Within the hangar, facilities include the following:

- Two complete universal docking systems for B747/B767 aircraft;
- Mobile docking for B737 aircraft;
- Mechanical handling bridge crane systems;
- Hydraulic servicing system;
- Pressure hot water and detergent aircraft washing systems;

- Complete tube material delivery system;
- Mass air system;
- Extensive electrical supplies, 115V/208V 3HP 400HZ, 380V 30A, 125A, 200A retractable reels;
- Extensive voice and data communications systems.

MECHANICAL SERVICES

For mechanical and electrical services design purposes, the hangar has been treated as two adjoining hangars of equal size. The heating system selected was the Wanson HTV controlled air distribution system, fired by natural gas, with two units for each bay.

The system employs the induction principle of air ejection from a nozzle. As the air expands from a nozzle it includes the surrounding, high-level air to provide a mixed air condition varying in temperature, velocity and volume along the path of the airstream. The performance specification requires an internal temperature of 20-21 deg. C. and rapid rewarming in the event of a hangar door being opened. These will normally be closed, but as all four have not been closed for any length of time during construction the system has yet to be tested fully.

The office/workshop annex has mechanical heating and ventilating without cooling (except office areas). Perimeter radiators are served by two Rendamax gas-fired fully modulating atmospheric boilers, each operating at two-thirds loading. This project marks the first use of these boilers by MacArdle McSweeney Associates, but

they have been used in some 20 other projects in Ireland.

Water supply is from Aer Rianta's main ring hydrant served from their reservoir with one million gallons capacity, but the building is not a high volume water user. Neither are there any unusual effluents, although petrol interceptors are obviously fitted to the underfloor drainage system.

For fire-fighting purposes, an internal hydrant system feeds the fire hose-reel system and foam carts within the building.

A central hydraulic system at 4,000 psi runs through floor ducts to serve hangar pits and can deliver 50 gallons per minute at eight different outlets. The system can be used for retracting undercarriages.

The mass air system, which is used to pressurise aircraft for checking of doors, windows etc for leaks and for turning the jet engines, will be able to deliver 258 lbs per minute at 45 psi when installed in March.

The mass air, central hydraulics, hot water/detergent, and drainage systems are the only ones located in the floor. The remainder, including all electrics, run at high level.

Passenger and good lifts were installed by O'Donnells and a special lifting platform in the hangar, for bringing aircraft engines up to mezzanine level, is by Industrial Logistics.

Unusual items are the universal docking systems, built and installed by PDL Airport Support Services to TEAM Aer Lingus' design. A tug pulls the B747 through

BSNews, March /April 1991 19

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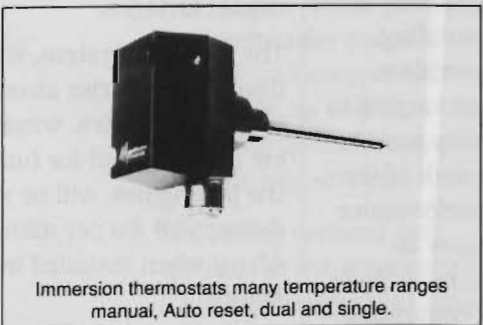
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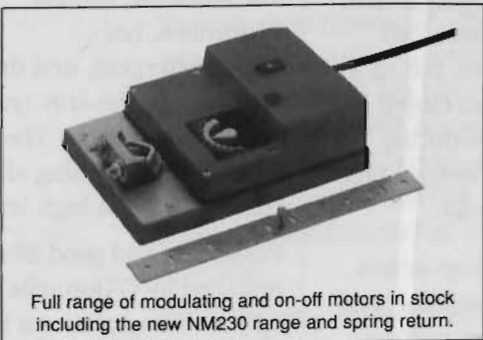
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DOI: 10.21427/D77715

the hangar doors and into the hangar so that the aircraft's nose is right up to the edge of the mezzanine floor - the tug then unhooks and can drive straight on through the office/workshop annex at ground floor level. Then the universal docking system can be positioned as required to fit the specific aircraft type and operational needs. Each docking system has six platform levels (rising to 70 feet) and they can be moved up and down, in and out, forward and aft.

CONTROL SYSTEMS

The fire alarm system is a stand-alone fully addressable system, the Wormold L1. There are conventional point smoke detectors and glass-break alarms in the office annex, while in the hangar a Detronics flame detection system combines infra red and ultra violet detectors for underwing protection across the whole floor are.

The building management system is the Trend System installed by Standard Control Systems and includes eight networked outstations of fully operating IBM PC's with graphics. It manages and controls the entire heating and ventilating systems in the annex building and the general building management of the hangar.

The hangar heating is managed and controlled by a Cylon system, but this is integrated with the Trend system so that both are accessible from the same PC's with Microsoft windows permitting both systems to be monitored on and operated from the same screen.

ELECTRICAL SERVICES

Aer Lingus had already rationalised the ESB HT supply for the entire TEAM Aer Lingus hangar complex, with supply being taken at one point for Aer Lingus' own HT distribution.

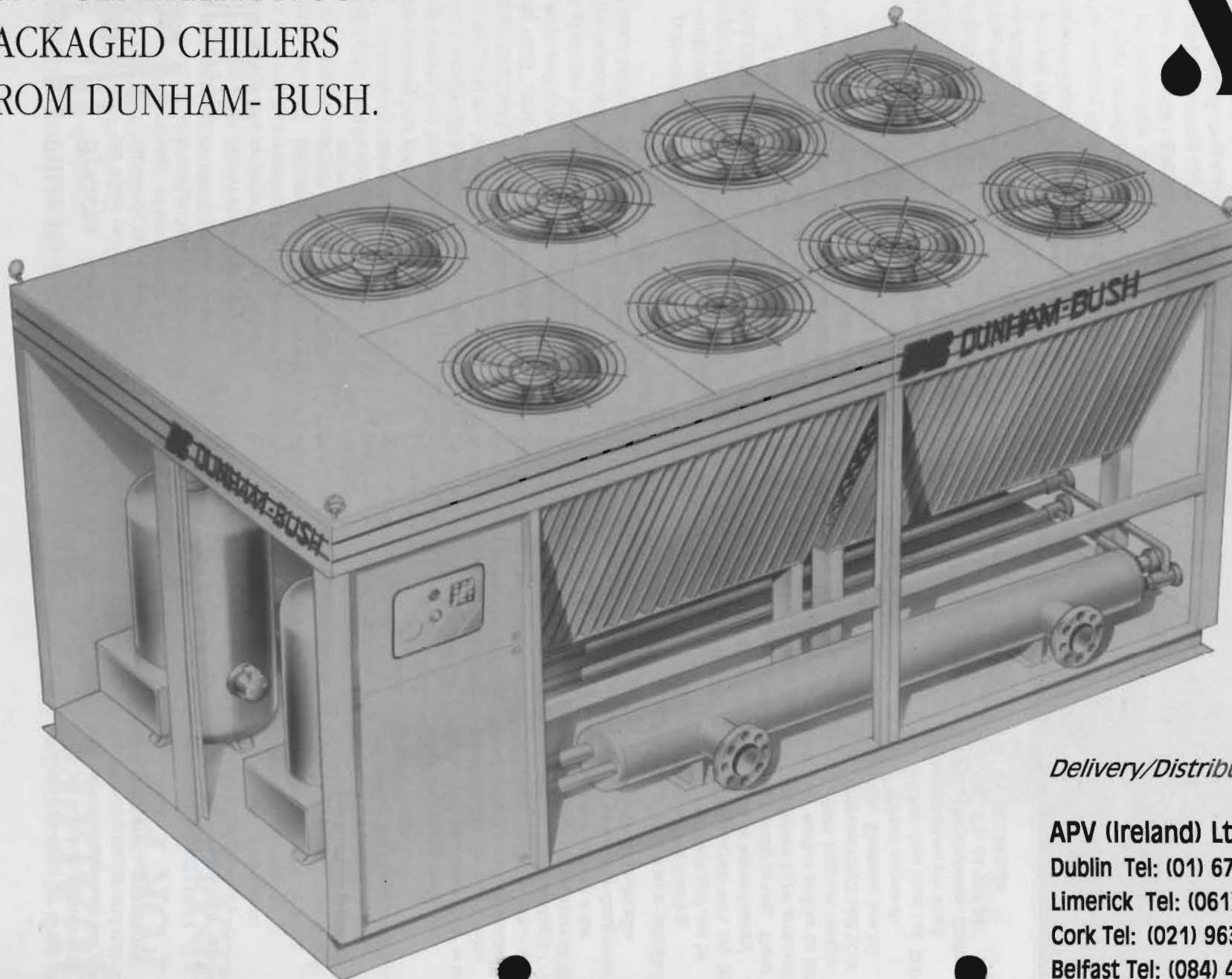
As with mechanical services, the hangar is treated as two separate bays for electrical design purposes, and there are two LT systems with a 1600 KVA transformer at either end. Distribution boards - about 50 of them - are located around and hangar, which is conventionally served with industrial type outlets, due to the hazardous zoning of the building, at 140mm off the floor.

Electrical distribution in the office/workshop annex is by a trunking system fitted flush in the floor screed. In the hangar, distribution is a high level with supply being provided by electrically operated descending cable reels. This method was adopted both for operational efficiency and safety requirements, with a number of inflammable materials being present at low level.

Lighting in the annex mainly comprises recessed modular glamox fittings with high-frequency control gear and creating low glare to suit VDU use in all offices. In some intense work areas, very low glare fittings with dimmable control gear have been fitted.

Hangar lighting is primarily V-Lite supermetalhalide sources. Emergency lighting in the hangar is a central battery operated system of high-level floodlights.

NEW GENERATION SCREW PACKAGED CHILLERS FROM DUNHAM- BUSH.



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Belfast Tel: (084) 451403. Fax: (084) 455938.

NEW PRODUCTS

Filter Housing System

Air Filter casings and holdings frames are the subject of a new 8-page, A4 sized leaflet from Waterloo Ozonair, a division of Hunter International plc.

The Waterloo Ozonair range includes both front and side withdrawal housing systems for bag, panel, HEPA, carbon and grease filters. Each housing system is individually described with manufacture, assembly, design and dimensional data given.

In addition to the wide and varied frames and casings offered as standard, Waterloo Ozonair can also build housings to customer specific requirements.

Copies of the leaflet are available on request from Waterloo Ozonair, Quarry Wood Industrial Estate, Aylesford, Maidstone, Kent ME20 7NB. Tel: (0622) 717861.

Copper Alloy Valves

BSI publication BS 2767: 1991 Specification for manually operated copper alloy valves for radiators, specifies designation, pressure and temperature ratings, materials, design and construction and testing of manual valves.

Included is a handwheel torque strength test, connections for metric copper tubes, compression type tailpiece connections, plating and draining facility. It supercedes BS 2767: 1972.

Copies of this standard are available priced St£24.70 from BSI Sales, Linford Wood, Milton Keynes, MK14 6LE

Dealing with Damp

A new guide, "Tackling Condensation" published by the BRE, highlights the problems of condensation and damp and provides a range of solutions to this persistent blight on buildings.

It is a problem which plagues both home owners and local authorities alike, and many councils are attempting to upgrade housing stock with better insulation and improved

heating. However, sealing buildings to save energy, according to one of the book's authors, can simply exacerbate the problems by depriving them of the ventilation necessary to prevent condensation.

One of the simpler yet most effective remedies for dealing with mould recommended by the guide is the application of a hygiene coating to the affected areas.

The BRE have subjected several coatings to stringent tests carried out over a number of years. Many failed to provide the claimed resistance to mould. However, one coating which performed exceptionally well was Steridex, manufactured by Liquid Plastics Ltd of Preston, which was found to eradicate mould completely and provide long term protection against further outbreaks.

Steridex is a water-based co-polymer which combines exceptional durability with a powerful yet non-toxic fungistatic system which, unlike those in conventional paints, does not leach out.

Details from Liquid Plastics Ltd., P.O. Box 7, London Road, Preston PR1 4AJ. Tel: 0772 59781

Hot Water on Tap

Hotrace, from Jimi-Heat, works by fixing a length of electric heater tape along a hot-water pipe. Heat is applied directly to the pipe and is maintained at a constant temperature, replacing

any heat loss along the length of the pipe. Insulation enveloping both the tracer tape and the pipe conserves the energy and makes the system very economical to run.

The system is easily fitted. It is suitable for installation in new systems when there is a considerable reduction in plumbing requirements. It eliminates the need for a hot-water recirculatory system with its associated return pipework which, in turn, saves space. It can also be fitted to existing hot-water systems.

Water and energy costs are further reduced since there is no wastage while the user drains water from the system waiting for hot water to reach the tap. Moreover, by maintaining a constant high temperature in the pipe, Hotrace prevents the growth of potentially dangerous bacteria such as Legionella.

Hotrace is offered in some parallel Meterheat or self-limiting Electrace versions and can be used in conjunction with any type of pipework or water-heating system currently in use. These allow the system to be activated section by section and/or by time control. Both versions comply with European CSTB and LCIE standards. Electrace has US factory Mutual approvals. Details from: Jimi-Heat Ltd, 200 Rickmansworth Road, Watford, Hertfordshire, England WD1 7JS. Tel: 44 932 34477. Fax: 44 923 240264



A heating tape fixed along the length of a hot-water pipe, under the insulation, maintains the heat in that pipe. This British system saves expensive plumbing as there is no longer any need for a recirculatory system. Because hot water is instantly available there is no need to keep the tap running until the hot water comes through, thus saving both energy and water. Comprehensive control systems are also available for Hotrace.

QUALITY COPPER TUBE - FOR PLUMBING AND HEATING INSTALLATION

For around 4,000 years, copper has been used successfully for services which store and transport water because of its virtues of malleability and corrosion resistance. Today's plumbing and heating installers rely on these natural properties to ensure that their work is quick and safe, giving long and trouble-free service with negligible maintenance costs.. So says David Moore, Sales Manger of Irish Metal Industries Ltd in this overview of the properties and applications of copper tube.

Millions of metres of copper tube are installed every year in Ireland alone and its significant use worldwide is shown by the appearance of copper installations in the most modest housing of developing Third World countries.

Over 90% of the market demand is satisfied by the use of copper tubes and fittings which are readily available through plumbers and builder's providers in size ranges and specifications to suit all applications.

For plumbing and heating installations, copper tube offers many benefits over other substitute materials. So confident are Irish Metal Industries of the product, that

they provide a 25-year guarantee with it. On the grounds of corrosion resistance alone, it proves outstanding. This is primarily due to it's noble character, it being a member of the same chemical family as silver and gold.

A further important contributing factor towards copper's superior corrosion resistance is its biocidal properties which recent research has suggested inhibits the growth of biological films and the proliferation of micro-organisms such as Legionella Pneumophila.

Copper is a non-toxic metal and a trace element of 2.5 to 5.0 milligrams per day is the essential quantity required to maintain normal health and enable the human body to absorb iron. Many foods contain naturally large amounts of copper, such as oysters - 35 parts per million (35 ppm), lobsters 170 ppm and chocolate 125 ppm which puts into perspective the EEC guide level in potable water of 3 ppm or 3 milligrams per litre.

Copper is therefore a popular, versatile and safe material for installations with any potable water supply that complies with the requirements of the

EEC or WHO International Standards.

The National Standards Authority of Ireland specify the qualities and properties of copper tube under IS: 238 : 1980. This standard refers to the basic sizes and tolerances required with special attention to internal cleanliness and finishing. The sizes covered are 15mm - 54mm (1/2" - 2").

Manufacturers who regularly have their production methods and product quality examined and passed by the National Standards Authority of Ireland are licensed to show the "Irish Standard Mark" on their products. Tube which does not carry this mark is unlikely to be regularly and independently examined by NSAI and may not meet the requirements.

For the best protection, installers and specifiers should insist that copper tube be to IS: 238 : 1980 and carry the "Standard Mark".

Copper Tube to IS : 238 : 1980 is the "workhorse" of the plumbing and heating industry because of its versatility and price. It is light, rigid and malleable being suitable for most above ground uses including hot and cold water, gas sanitation and heating installations, not forgetting many general engineering applications.

This general purpose tube, with its inherent ease of bending, minimises the number of fittings required in a given system, helping to reduce installation costs. A properly designed and installed system using copper tube bearing the "Irish Standard Mark" can confidently be expected to last the lifetime in which it is installed. No other plumbing material has all the positive benefits of copper, together with a 4,000 track record of proven performance.

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Wavin takes to the stage — In yet another development exploring the non-traditional use of Wavin pipe, a stage set — measuring approximately 30 ft square — has been created using the company's product for the TEAM Education Theatre Company's production of Firestone.

Set designer Paula McAnnerney was looking for a framework which was strong enough to support a series of cloth backdrops, light enough to transport easily and yet flexible enough to assemble and dismantle quickly. Wavin pipe provided the perfect solution.

This unique development follows hot on the heels of the Dalkey schoolchildren who are learning to play music using Wavin pipes.

Plumbing Olympics — The International Skill Olympics will take place in Amsterdam in June/July of this year and it is expected that a candidate will be selected to represent Ireland in the Plumbing contest.

As a nation we have an excellent reputation in this sector of the overall Skill Olympics having finished first and won the Gold Medal last year when the contest was held in Birmingham.



Marie Breen, Design Assistant, TEAM pictured with Gerard Doheny, Marketing Manager, Wavin and Pauline Donnolly, Production Manager, TEAM.

Teddybear's Picnic — No disrespect meant to Teddy Bourke... in fact the opposite is intended Teddy. Congratulations on the manner in which you hosted the CIBSE visit to Tallaght.

As if the 3-course meal was not enough, making tickets available to any of the 12 cinemas in the complex to all and sundry was an even nicer touch. Just a small thing but much appreciated by all nonetheless.

CIBSE is not... merely an organisation for building services consultants as I intimated in the January issue of BSNews.

Indeed, many of its more

active members — including those in positions of office at the highest level — have been drawn from the supplier and contracting sectors of the business.

Not to mention of course my failure to refer to MEBSCA.

Apologies to all who may have been offended.

Eamonn McGrattan for Aras An Uachtarán?... well no, not quite! However, he has accepted the role of President of the BTU. This is an honorary position but one which Eamonn is unlikely to allow drift into "elder statesman" mode.

He will undoubtedly bring to the position his vast organisational skills and, more importantly perhaps, his incomparable energy and enthusiasm.

He's likely to do for the role of BTU President as Mary Robinson has done for the national presidency.

Not, of course, that John Ennis' task as Captain will be any less onerous. This is a very demanding position and one which requires a great deal of commitment and dedication. John Ennis won't disappoint.



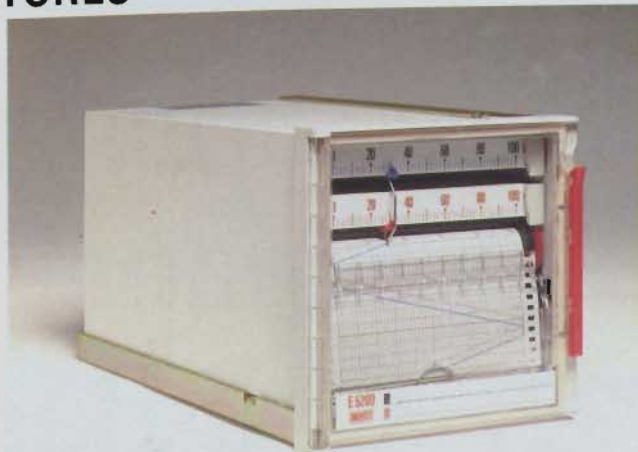
Damien Parlour, Managing Director, Tempair Ltd (right) pictured receiving his award as Mitsubishi Electric Industrial Division Distributor of the Year from Fergus Madigan, Managing Director, Mitsubishi Electric. Standing between them is Mike Sheehan — I won't mention to golf Mike, I think I've given you enough stick over that — with David Ross, General Manager, Mitsubishi Electric Industrial Division on the left.

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